STIP Project Nos: I-5874, I-5875, and I-5008

Improvements to I-40 Interchanges

Exit 100: Jamestown Road (S.R. 1142)

Exit 107: Drexel Road (S.R. 1712)

Exit 111: Carolina Street SE (S.R. 1734)

Public Meeting November 16, 2017



Morganton, Burke County

NCDOT Wants to Hear from You

Public involvement is an important part of the project development process. The North Carolina Department of Transportation (NCDOT) encourages citizen involvement on transportation projects, and will consider your suggestions and address your concerns. Today's meeting is another important step in NCDOT's efforts to keep you involved. Your input is valued and your attendance greatly appreciated.

NCDOT is presenting proposed improvement alternatives for the following State Transportation Improvement Program (STIP) projects:

- **STIP Project I-5874** at Exit 100 (S.R. 1142/Jamestown Road), information is presented in page 2;
- **STIP Project I-5875** at Exit 107 (S.R. 1712/Drexel Road), information is presented in page 5; and

• **STIP Project I-5008** at Exit 111 (S.R. 1734/Carolina Street SE), information is presented in page 9.

Planning, environmental studies, and design are underway. Bicycle and pedestrian amenities will be addressed in accordance with NCDOT policies, and additional amenities may be included at the request of the local governments per a municipal agreement.







Connecting people, products, and places safely and efficiently with customer focus, accountability, and environmental sensitivity to enhance the economy and vitality of North Carolina



STIP Project I-5874

Exit 100:

Jamestown Road (S.R. 1142)

This interchange is located south of Morganton. The existing diamond interchange includes a bridge carrying Jamestown Road over I-40. Two alternatives are presented.

Alternate 1, Roundabout
Option, would change the existing interchange to a diamond with roundabouts at ramp termini at Jamestown Road. A new bridge will be constructed over I-40 to the west of the existing structure.

Alternate 2, <u>Partial</u> <u>Cloverleaf Option</u>, would change the interchange to a

partial cloverleaf with a ramp/loop combination. A new bridge will be constructed over I-40 to the east of the existing structure.

STIP Project I-5874 Schedule*

Preferred Alternative Selected –

December 2017

Environmental Studies

Completed – January 2018

Environmental Document

Approved – February 2018

Right-of-Way – June 2018

Final Plans Completed – March 2020

Project LET – Iune 2020

*Subject to change

STIP Project I-5874 Impacts

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	Alternate 1 Roundabout	Alternate 2 Partial Cloverleaf
Residential Property Takes	0	0
Commercial Property Takes	0	0
Linear Feet of Streams	0	0
Acres of Wetlands	0	0

STIP Project I-5874 Costs

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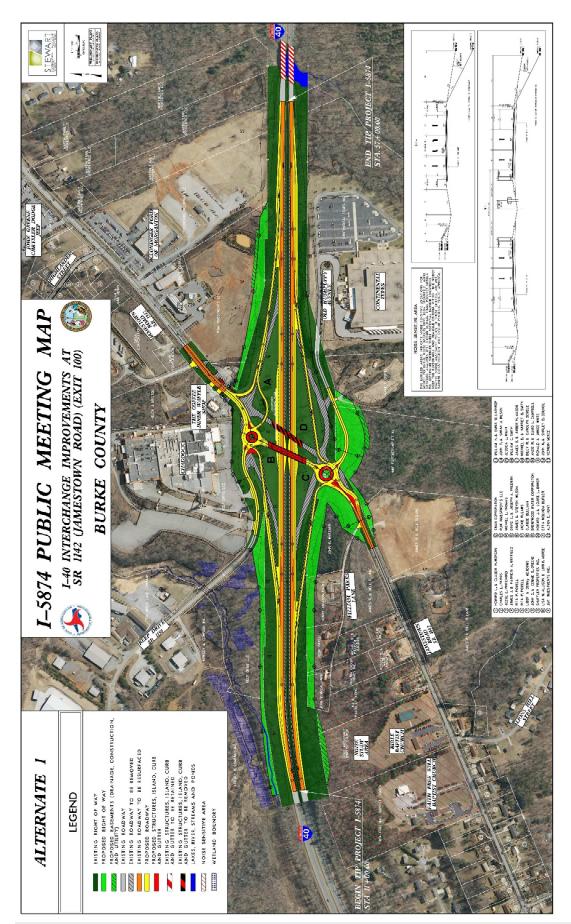
	Alternate 1	Alternate 2
	Roundabout	Partial Cloverleaf
Right-of-Way & Utilities	\$02.0 M	\$04.1 M
Construction	\$13.3 M	\$14.6 M
TOTAL	\$15.3 M	\$18.7 M

Need and Purpose for these Projects

These projects are needed to address outdated interchange designs. The purpose is to reconfigure interchanges to meet current NCDOT design standards, improve traffic operations and safety.

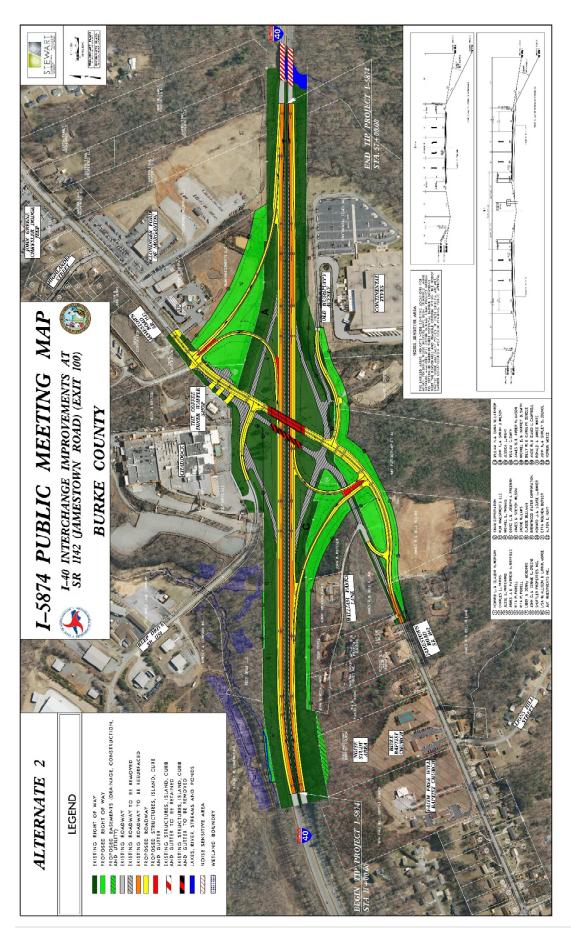
















STIP Project I-5875 Schedule*

Preferred Alternative Selected – December 2017

Environmental Studies Completed – February 2018

Environmental Document Approved – March 2018

Right-of-Way – August 2018

Final Plans Completed – May 2020

Project LET – August 2020

*Subject to change

STIP Project I-5875

Exit 107:

Drexel Road (S.R. 1712)

This interchange is located southeast of Morganton. The existing partial cloverleaf interchange includes a bridge carrying Drexel Road over I-40. Three alternatives are presented.

Alternate 1, <u>Partial Cloverleaf</u>
<u>Option</u>, would change the existing interchange to a partial cloverleaf with a ramp/loop combination. A new bridge will be

constructed over I-40 to the east of the existing structure.

Alternate 2, **Diamond Option**, would change the interchange to a diamond. A new bridge will be constructed over I-40 to the east of the existing structure.

Alternate 3, **Roundabout Option**, would change the interchange to a diamond with a roundabout terminus at the south end. A new bridge will be constructed over I-40 to the east of the existing structure.

STIP Project 1-5875 Impacts

Alternate 1 Alternate 2 Alternate 3 Partial Diamond Roundabout Cloverleaf Residential Property Takes 2 Commercial Property Takes Linear Feet of Streams 1411 1135 968 Acres of Wetlands 0.27 0.32 0.26

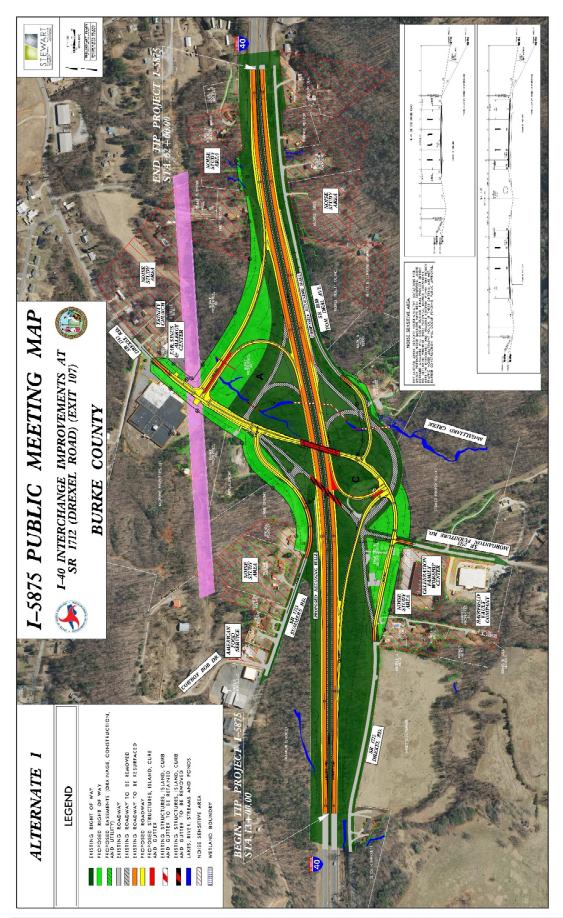
STIP Project I-5875 Costs

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TOTAL	\$27.0 M	\$27.6 M	\$25.8 M
Construction	\$21.7 M	\$22.5 M	\$22.2 M
Right-of-Way & Utilities*	\$05.3 M	\$05.1 M	\$03.6 M
	Partial Cloverleaf	Diamond	Roundabout
	Alternate 1	Alternate 2	Alternate 3

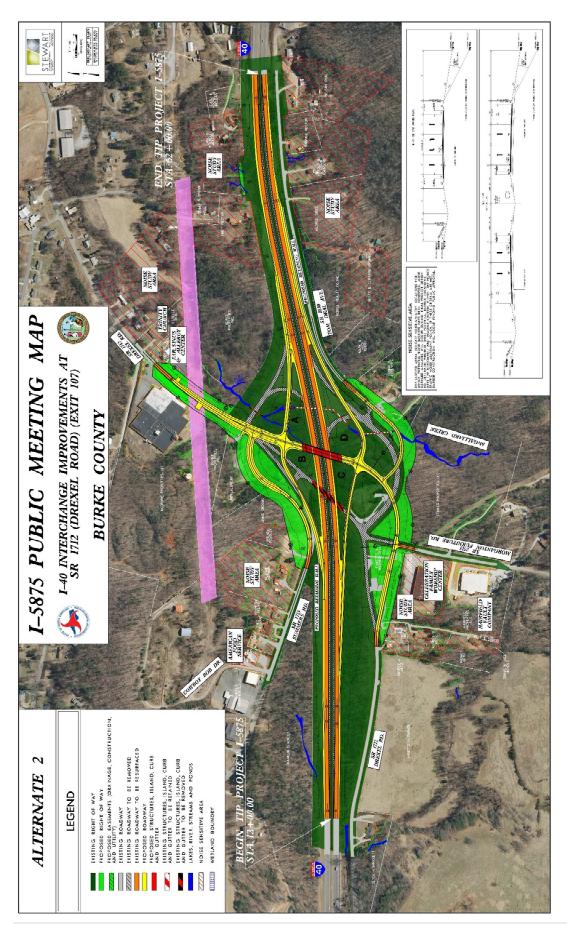






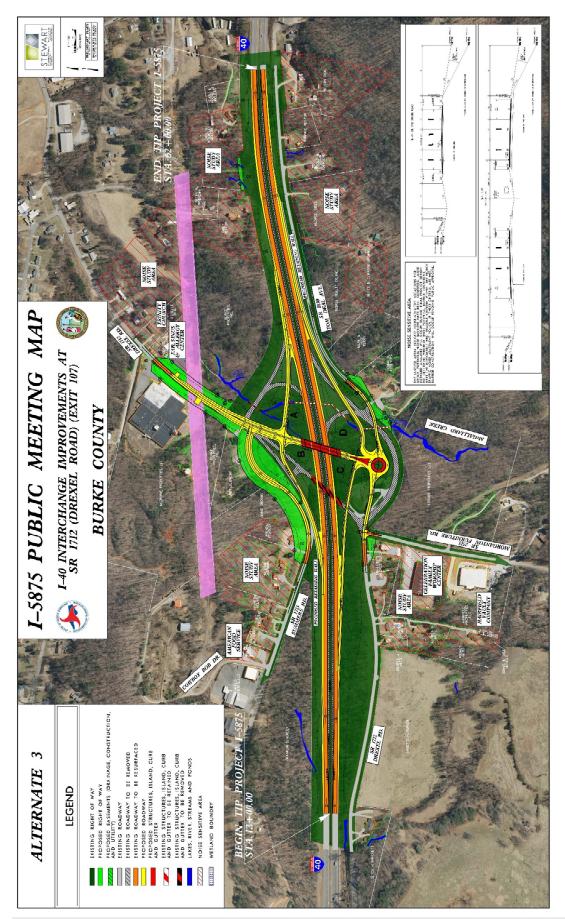
















STIP Project I-5008

Exit 111:

Carolina Street SE (S.R. 1734)

This interchange is located near the Town of Valdese. The existing interchange includes a bridge carrying Carolina Street SE over I-40. Three alternatives are presented.

Alternate 1, Roundabout
Option with Carolina Street
SE/Mourglea Avenue
Roundabout, would change
the interchange to a diamond
with roundabouts at the ramp
termini. A new bridge will be

constructed over I-40 to the west of the existing structure.

Alternate 2, **Roundabout Option**, would change the interchange to a diamond with roundabouts at the ramp termini. A new bridge will be constructed over I-40 to the west of the existing structure.

Alternate 3, <u>Partial</u> <u>Cloverleaf Option</u>, would change the interchange to a partial cloverleaf with a ramp/loop combination in the northeast quadrant and a ramp/loop combination in the southwest quadrant. A new bridge will be

constructed over I-40 to the west of the existing structure.

STIP Project I-5008 Schedule*

Preferred Alternative Selected – December 2017

Environmental Studies Completed – March 2018

Environmental Document Approved – April 2017

Right-of-Way – October 2018

Final Plans Completed – July 2020

Project LET – October 2020

*Subject to change

STIP Project I-5008 Impacts

Alternate 1 Alternate 2 Alternate 3 Roundabout #1 Roundabout #2 Partial Cloverleaf 12 Residential Property Takes Commercial Property Takes 0 Linear Feet of Streams 1911 413 413 Acres of Wetlands 0.27 0.32 0.26

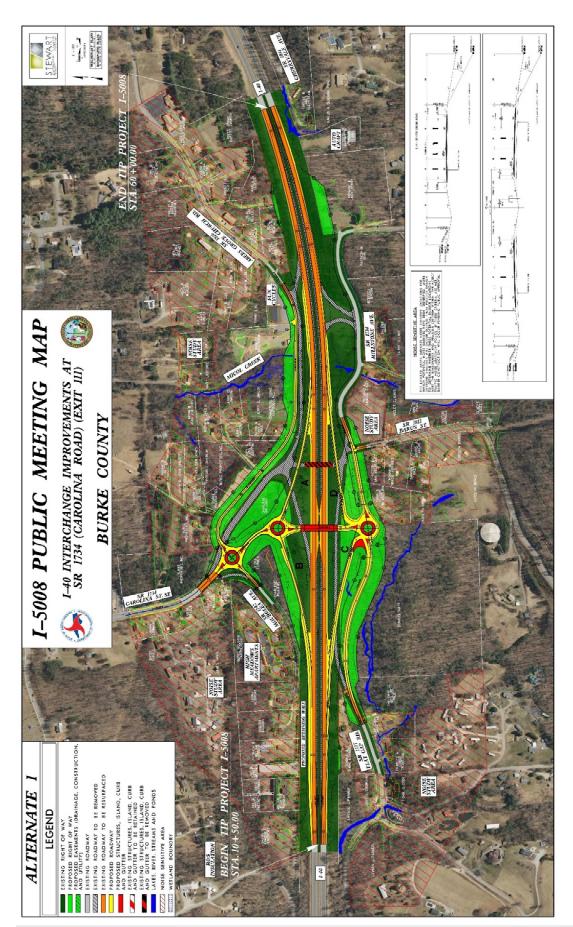
STIP Project I-5008 Costs

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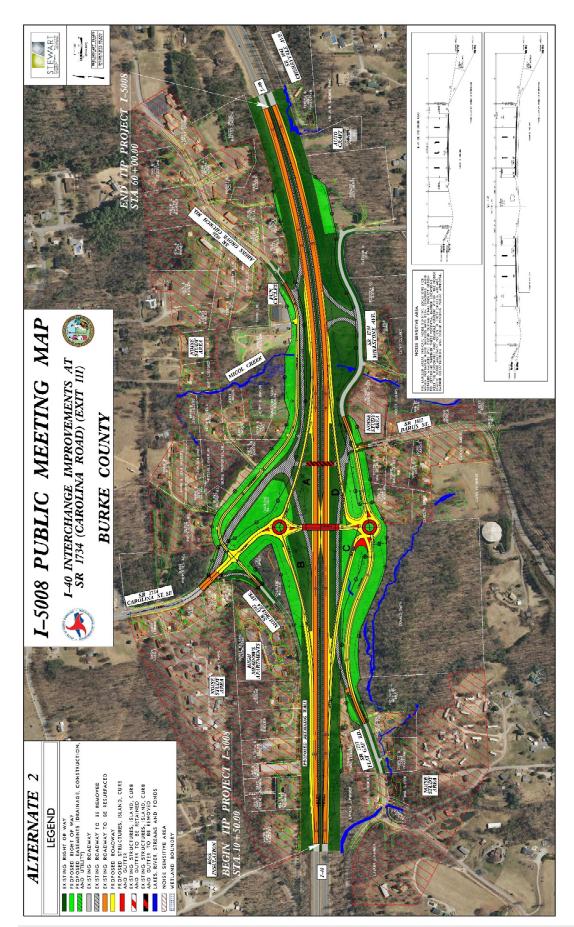
	Alternate 1 Roundabout #1	Alternate 2 Roundabout #2	Alternate 3 Partial Cloverleaf
Right-of-Way & Utilities	\$05.3 M	\$05.3 M	\$06.3 M
Construction	\$22.8 M	\$23.0 M	\$20.1 M
TOTAL	\$28.1 M	\$28.3 M	\$26.4 M



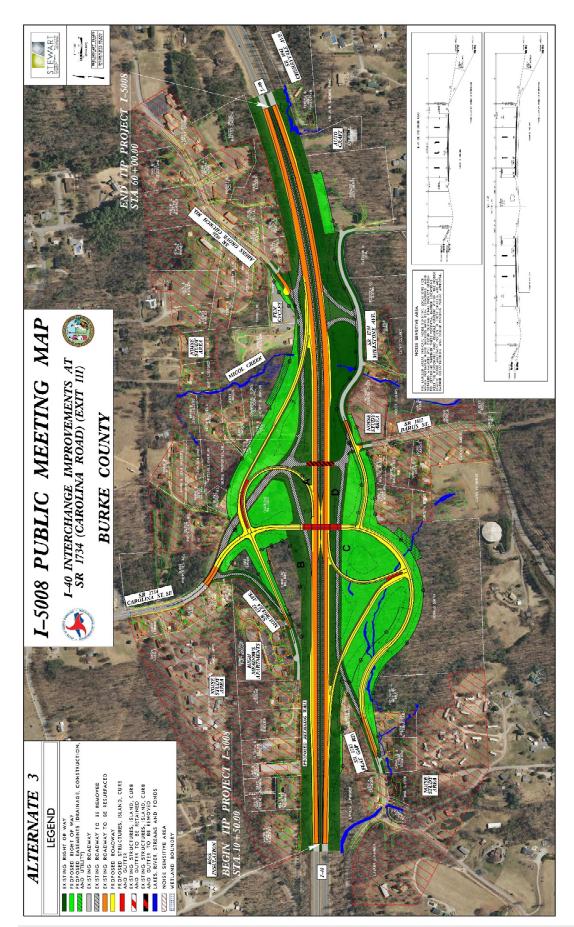














Roundabout Quick Facts

- What is a roundabout? A roundabout is a
 circular intersection that requires entering
 traffic to: first, yield to traffic already moving
 in the intersection; and second, travel
 counterclockwise around the circle prior to
 exiting. A roundabout keeps traffic flowing
 on a counterclockwise movement, and
 prevents traffic from backing up and
 congesting by eliminating stop signs and
 traffic signals.
- Why install a roundabout? The NCDOT proposes roundabouts as part of intersection improvements to help address safety and congestions concerns. Most serious types of crashes are t-bone, left-turn, and head-on collisions that occur at traditional intersections. Roundabouts help reduce serious crashes by directing vehicular travel in the same direction at a lower speed.
- What is the speed in roundabouts? The typical speeds of vehicles maneuvering through roundabouts is less than 20 miles per hour. The lower speed allows for easier and safer turns in the roundabout. The modern roundabout is smaller, operates more efficiently, and have lower crash rates than a traffic circle. Traffic efficiency and safety is improved because vehicles are required to travel at a lower speed.
- What is the size of a roundabout? The size of a roundabout is determined by the number of vehicles, the size of the largest vehicle using

- the roundabout, the need to achieve appropriate speeds throughout the roundabout, and the layout of the existing intersection. The size of a single-lane roundabout is about one third the length of a football field.
- Is a roundabout more expensive than a signalized intersection? The initial construction cost of a roundabout is more expensive than a signalized intersection. However, maintenance and utility costs of a roundabout are less than a traffic signal over time.
- How does a pedestrian navigate a roundabout? A
 pedestrian should walk around the outside,
 not through the middle of a roundabout.
 Roundabouts usually have marked sidewalks
 or striped crossings to help pedestrian
 navigate.
- How does a bicyclist navigate a roundabout? A
 bicyclist should follow the same rules as a
 vehicle or dismount the bicycle and walk
 along the outside of a roundabout like a
 pedestrian.
- How to drive a roundabout? Drivers should yield to vehicles already in the roundabout, and to pedestrians and bicyclists on crosswalks. Drivers inside the roundabout have the right-of-way. Drivers should stay in the lane of travel and use turn signals when exiting roundabouts.

Please see the **Roundabout Video Presentation** to learn more about roundabouts.

The video is also available to be viewed at

https://ncdot.gov/projects/publicmeetings.



Next Steps

Following today's public meeting, NCDOT will consider all comments received about the functional design alternatives for STIP Projects I-5874, I-5875, and I-5008. Comment forms are provided in the next page. To ensure your suggestions or concerns are considered in the decision-making process, **all comment forms**, **written questions**, **and emails must be submitted to NCDOT no later than December 6, 2017**. Completed comment forms may be mailed to Doug Taylor to the addresses provided below.

After receipt of all comments, NCDOT will select the preferred alternatives for each of the projects. Your input will be considered with environmental, socio-economic, project cost, traffic forecast, and design criteria to determine alternatives to be carried forward.



For additional information, please contact:

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(919) 866-4761



STIP Project Nos: I-5874, I-5875, and I-5008



COMMENT FORM

Public Meeting at Mt. Home Baptist Church, Morganton, NC November 16, 2017

Name:
Address:
Email:
Please check project(s) that apply:
STIP Project I-5874 Interchange Improvements to Exit 100 (Jamestown Road/S.R. 1142) STIP Project I-5875 Interchange Improvements to Exit 107 (Drexel Road/S.R. 1712) STIP Project I-5008 Interchange Improvements to Exit 111 (Carolina Street SE/S.R. 1734)
Comments:

Please submit completed comment forms to NCDOT staff or consultants today or mail before December 6, 2017.



Doug Taylor, PE Consultant Project Manager STEWART 421 Fayetteville Street, Suite 400 Raleigh, NC 27601

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